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STATE OF COLORADO

DEPARTMENT OF TRANSPORTATION

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U.S. Department of Transportation
Dockets Management Facility
Room PL-401
400 Seventh Street, S.W.
Washington, DC 20590-0001

To Whom It May Concern:

The Colorado Department of Transportation (CDOT) wishes to submit the following comments in response to FHWA's Notice of Public Rulemaking (NPRM) regarding the use of the FHWA Traffic Noise Model (TNM) for highway traffic noise analysis for Federal-aid projects. This NPRM was published in the August 20, 2004 issue of the Federal Register. While CDOT in general supports the migration to TNM, we continue to have some concerns regarding the model and its functionality. This is the reason that CDOT has yet to endorse the use of TNM for its highway projects.

As one of several State Highway Agencies (in addition to such states as California, Florida, Georgia, and Washington) that was allowed to develop and use its own Reference Energy Mean Emission Level (REMEL) data for use with the STAMINA 2.0 noise model, CDOT has always been concerned with the mandate to use the national REMELs that were developed for TNM. Our 1993 proposal to develop REMELs for STAMINA was based on the fact that the original national REMELs over-predicted noise levels by 1-4 dBA when compared to our field measurements. When we began to look at TNM for the first time in the late 1990's, we noticed the same 1-4 dBA over-prediction with TNM, compared to field measurements and STAMINA model comparisons. As you are undoubtedly aware, any over-prediction of noise levels could potentially result in increased noise barrier costs that may be very problematic with the current budgetary constraints and crises faced by all levels of government.

We acknowledge and appreciate FHWA's most recent efforts to address over-predictions in its validation effort and the incorporation of updated propagation algorithms into TNM v. 2.5.

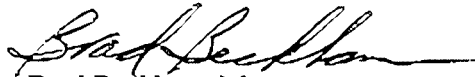
CDOT is currently in the midst of a research project to determine the performance of TNM in Colorado and to develop standards for its use. During the course of this effort we have discovered many positive aspects of TNM and are therefore very encouraged. At the same time, we have discovered several anomalies of concern that we are still attempting to resolve, including pavement width, ground zones, terrain lines, the distance away from the highway for which TNM is valid, and the requirement to use "average" pavement. We are continuing to study these issues and will share information when available.

One additional issue is the noise reduction predicted by a TNM barrier versus a STAMINA barrier. Based on our research as well as that of others, early indications are that TNM barriers predict much greater reduction for a wall than a barrier predicted with STAMINA. This may appear to be a positive factor, as with TNM it may be possible to build shorter walls. However, if these TNM-designed walls do

not perform as they should, which has been suggested in certain forums, it could be a financial and public relations disaster. CDOT would appreciate some direction from FHWA as to how this issue will be resolved.

CDOT is committed to continuing coordination and cooperation with FHWA and the Volpe Center throughout this very important process, and we wish to thank the USDOT for the opportunity to submit comments on this NPRM. If there are any questions concerning these comments, please do not hesitate to contact Bob Mero, CDOT Noise Specialist, at (303) 757-9016.

Very truly yours,

A handwritten signature in black ink, appearing to read "Brad Beckham", with a long horizontal flourish extending to the right.

Brad Beckham, Manager
Environmental Programs Branch